

# Notice of Allowability

Application No.

09/981,666

Examiner

Yemane M. Gerezgiher

Applicant(s)

ROACH ET AL.

Art Unit

2144

## -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 03/30/2006.
2. ☒ The allowed claim(s) is/are 17, 18, 20 and 21 (renumbered 1-4).
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
  1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

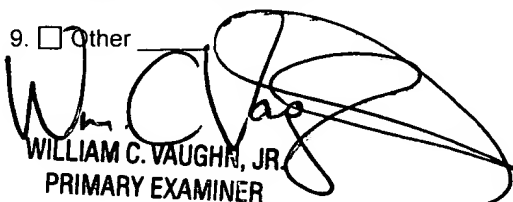
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

### Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date 11/23/2005
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

  
WILLIAM C. VAUGHN, JR.  
PRIMARY EXAMINER

**DETAILED ACTION**

***Terminal Disclaimer***

1. The terminal disclaimer filed on 03/30/2006 has approved and made of record.

**EXAMINER'S AMENDMENT**

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Daniel H. Golub (Reg. No. 33,701) on June 23, 2006.

- Pursuant to MPEP § 606.01, the title has been amended to read:  
-- BROADBAND NETWORK SYSTEM CONFIGURED TO TRANSPORT  
AUDIO OR VIDEO AT OR BELOW THE TRANSPORT LAYER, AND  
ASSOCIATED METHOD--

3. In the claims:

Please replace/amend claims 17 and 20 as follows:

Claim 17. (Currently amended) In an Open System Interconnection (OSI) model having at least a transport layer, a method for transferring user datagram protocol (UDP) packets over a broadband network system from a broadband interface unit (BIntU) transceiver to a data distribution center, wherein the data distribution center is coupled over a network to a network access point, the method comprising:

supplying function calls to the BIntU transceiver from a personal computer with a computer processor, wherein the personal computer is separate from the BIntU ~~transceiver~~ transceiver, and the BIntU transceiver is positioned between the network access point and the personal computer;

generating the UDP packets in the BIntU transceiver and transmitting the UDP packets over the network solely at ~~or below~~ the transport layer, the generating and transmitting of the UDP packets including:

encoding, with an encoder, audio or video information, within the BIntU transceiver at the transport layer in order to generate UDP frame information at the transport layer;

temporarily storing the UDP frame information solely at ~~or below~~ the transport layer as a UDP packet within the BIntU transceiver ~~a protocol stack~~;

transmitting the UDP packet directly from the BIntU transceiver ~~protocol stack~~ to the network access point at, ~~or below~~, the transport layer;

transmitting the UDP packet from the network access point to the data distribution center at, ~~or below~~, the transport layer;

transmitting the UDP packet from the data distribution center to a network destination address device at ~~or below~~ the transport layer;

wherein the UDP information output by the encoder travels from the encoder to ~~the stack and from the stack to~~ the network access point solely at,

~~or below~~, the transport layer and without being processed by the computer processor in the personal computer; and

indicating, by the data distribution center, that the data distribution center received information from the BIntU transceiver in response to the UDP packet.

Claim 20. (Currently amended) In an Open System Interconnection (OSI) model having at least an application layer and a transport layer, a broadband network system configured to transfer user datagram protocol (UDP) packets from a broadband interface unit (BIntU) transceiver, the broadband network system comprising:

a network access point;

a data distribution center coupled over a network to the network access point;

a personal computer with a computer processor that supplies function calls to the BIntU transceiver; where the personal computer is separate from the BIntU transceiver, and the BIntU transceiver is positioned between the network access point and the personal computer;

wherein the BIntU transceiver generates packets for transmission over the network solely at ~~or below~~ the transport layer, and the BIntU transceiver includes:

an encoder/decoder (codec) configured to alternatively encode or decode audio or video information at the transport layer and alternatively output or receive UDP frame information at the transport layer, and

a digital signal processor (DSP) portion coupled to the codec, wherein the DSP portion temporarily stores the UDP frame information solely at, ~~or below,~~ the transport layer as a UDP packet within the BIntU transceiver ~~a protocol stack,~~ and wherein when said codec functions to encode audio or video information, the UDP packet is transmitted directly from the codec to the DSP portion, the UDP packet is transmitted ~~directly from the protocol stack~~ of the DSP portion to the network access point at, ~~or below,~~ the transport layer; the UDP packet is transmitted from the network access point to the data distribution center at, ~~or below,~~ the transport layer; and the UDP packet is transmitted from the data distribution center to a network destination address device at ~~or below~~ the transport layer; wherein the UDP information output by the codec travels from the codec to the ~~stack and from the stack to the~~ network access point solely at, ~~or below,~~ the transport layer and without being processed by the computer processor in the personal computer; and

wherein the data distribution center is configured to receive the UDP packet from the BIntU transceiver at ~~or below~~ the transport layer, and the data distribution center is configured to interface with the BIntU transceiver to indicate whether the data distribution center received information from the BIntU transceiver wherein data transmitted between the BIntU transceiver and the data distribution center is maintained at, ~~or below,~~ the transport layer.

*Allowable Subject Matter*

4. Claims 17, 18, 20 and 21 (renumbered 1-4) are allowed.

The following is an examiner's statement of reasons for allowance:

None of the prior art of record taken singularly or in combination teaches or suggests a method or a system in a broadband network system configured to transfer a UDP packets from a broadband interface unit transceiver; the broadband interface unit transceiver been placed between the personal computer and a network access point; in response to receiving a function call at the broadband interface unit transceiver from a personal computer (request initiated from a personal computer), generating UDP packets at the broadband interface unit transceiver and transmitting the generated UDP packets exclusively at the transport layer of the OSI model; the generating and transmitting functional steps including therein encoding audio or video data within the broadband interface unit transceiver at the transport layer, producing UDP frames at the transport layer; temporarily storing the UDP frame information exclusively at the transport layer as a UDP packet within the broadband interface unit transceiver; at the transport layer, transmitting the UDP packet immediately from the broadband interface unit transceiver to the network access point, from the network access point to the data distribution center, and further from the data distribution center to a destination

device at the transport layer; where the UDP information output by the encoder travels from the encoder to the network access point exclusively at the transport layer and without being processed by the computer processor in the personal computer; and further in combination with a functional limitation of indicating (acknowledgement) by the data distribution center, that the data distribution center received information from the broadband interface unit transceiver in response to the UDP packet as recited in claims 17 and 20.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

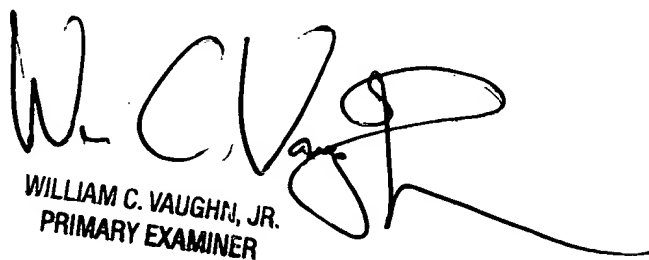
5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yemane M. Gerezgiher whose telephone number is (571) 272-3927. The examiner can normally be reached on 9:00 AM - 6:00 PM Mon - Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William C. Vaughn can be reached on (571) 272-3922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2144

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Yemane M. Gerezgiher  
Patent Examiner, CS

  
WILLIAM C. VAUGHN, JR.  
PRIMARY EXAMINER